ABSTRACT

A binarizer binarizes a video signal input from an A/D converter and a video signal output from a line memory using an average luminance value provided from a detection window 5 video signal processor as a threshold value, and outputs a binary pattern. A reference pattern generater generates a plurality of reference patterns. An angle detector compares the binary pattern with each of the plurality of reference patterns, and outputs the angle of a matched reference pattern 10 as angle information. An arc shape detector outputs the edge angle information of a picture based on a combination of the angle information of an interpolation scanning line including an object interpolation pixel and the angle information of interpolation scanning lines above and below the interpolation 15 scanning line.